#include<pthread.h>

#include<stdio.h>

#include<stdlib.h>

float avg;

int max,min;

void \*average(void \*a)

{

int s=0,i=1;

int \*arr=(int\*)a;

for(i=1;i<arr[0];i++)

s+=arr[i];

avg=s\*1.0/(i-1);

pthread\_exit(0);

}

void \*maximum(void \*a)

{

int i=2;

int \*arr=(int\*)a;

max=arr[1];

for(;i<arr[0];i++)

if(max<arr[i])

max=arr[i];

pthread\_exit(0);

}

void \*minimum(void \*a)

{

int i=2;

int \*arr=(int\*)a;

min=arr[1];

for(;i<arr[0];i++)

if(min>arr[i])

min=arr[i];

pthread\_exit(0);

}

void main(int argc,char\* argv[])

{

pthread\_t t1,t2,t3;

pthread\_attr\_t attr;

pthread\_attr\_init(&attr);

int i=1;

int \*arr=calloc(100,sizeof(int));

arr[0]=argc;

for(i=1;i<=argc;i++)

arr[i]= atoi(argv[i]);

pthread\_create(&t1,&attr,average,arr);

pthread\_create(&t2,&attr,maximum,arr);

pthread\_create(&t3,&attr,minimum,arr);

pthread\_join(t1,NULL);

pthread\_join(t2,NULL);

pthread\_join(t3,NULL);

printf("AVG = %0.2f\n",avg);

printf("MAX = %d\n",max);

printf("MIN = %d\n",min);

}

/\*

PS F:\SEM4\OS\Assignment13> gcc -o k threads.c

PS F:\SEM4\OS\Assignment13> ./k 11 12 13 14 15

AVG = 13.00

MAX = 15

MIN = 11

PS F:\SEM4\OS\Assignment13>

\*/